Claims:

1. In a transceiver, a method of adapting the impulse noise protection capability during steady-state communication comprising:

receiving using a first FIP setting; and

switching to receiving using a second FIP setting.

2. The method of claim 1, wherein the switching is based on a detection of errors.

3. The method of claim 1, wherein at least one of the first or second FIP settings are specified in a message that is received from a second transceiver.

4. The method of claim 1, wherein at least one of the first or second FIP settings are specified in a message that is sent to a second transceiver.

5. The method of claim 1, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is received from a second transceiver.

6. The method of claim 1, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is sent to a second transceiver.

7. The method of claim 1, wherein the switching is synchronized based on a FEC codeword count.

8. The method of claim 7, wherein a message is received from a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

9. The method of claim 7, wherein a message is sent to a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

10. In a transceiver, a method of adapting the impulse noise protection capability during steady-state communication comprising:

transmitting using a first FIP setting; and

switching to transmitting using a second FIP setting.

11. The method of claim 10, wherein the switching is based on a detection of errors.

12. The method of claim 10, wherein at least one of the first or second FIP settings are specified in a message that is sent to a second transceiver.

13. The method of claim 10, wherein at least one of the first or second FIP settings are specified in a message that is received from a second transceiver.

14. The method of claim 10, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is received from a second transceiver.

15. The method of claim 10, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is sent to a second transceiver.

16. The method of claim 10, wherein the switching is synchronized based on a FEC codeword count.

17. The method of claim 16, wherein a message is sent to a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

18. The method of claim 16, wherein a message is received from a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

19. A transceiver designed to adapt the impulse noise protection capability during steady-state communication comprising:

means for receiving using a first FIP setting; and

means for switching to receiving using a second FIP setting.

20. The transceiver of claim 19, wherein the switching is based on a detection of errors.

21. The transceiver of claim 19, wherein at least one of the first or second FIP settings are specified in a message that is received from a second transceiver.

22. The transceiver of claim 19, wherein at least one of the first or second FIP settings are specified in a message that is sent to a second transceiver.

23. The transceiver of claim 19, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is received from a second transceiver.

24. The transceiver of claim 19, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is sent to a second transceiver.

25. The transceiver of claim 19, wherein the switching is synchronized based on a FEC codeword count.

26. The transceiver of claim 25, wherein a message is received from a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

27. The transceiver of claim 25, wherein a message is sent to a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

28. A transceiver designed to adapt the impulse noise protection capability during steady-state communication comprising:

means for transmitting using a first FIP setting; and

means for switching to transmitting using a second FIP setting.

29. The transceiver of claim 28, wherein the switching is based on a detection of errors.

30. The transceiver of claim 28, wherein at least one of the first or second FIP settings are specified in a message that is sent to a second transceiver.

31. The transceiver of claim 28, wherein at least one of the first or second FIP settings are specified in a message that is received from a second transceiver.

32. The transceiver of claim 28, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is received from a second transceiver.

33. The transceiver of claim 28, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is sent to a second transceiver.

34. The transceiver of claim 28, wherein the switching is synchronized based on a FEC codeword count.

35. The transceiver of claim 34, wherein a message is sent to a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

36. The transceiver of claim 34, wherein a message is received from a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

37. In a transceiver, a method of adapting the impulse noise protection capability during initialization comprising:

receiving using a first FIP setting; and

switching to receiving using a second FIP setting.

38. In a transceiver, a method of adapting the impulse noise protection capability during initialization comprising:

transmitting using a first FIP setting; and

switching to transmitting using a second FIP setting.

39. A transceiver designed to adapt the impulse noise protection capability during initialization comprising:

means for receiving using a first FIP setting; and

means for switching to receiving using a second FIP setting.

40. A transceiver designed to adapt the impulse noise protection capability during initialization comprising:

means for transmitting using a first FIP setting; and

means for switching to transmitting using a second FIP setting.

41. In a multicarrier modulation environment, a method for determining a length of an impulse noise event comprising:

demodulating a plurality of bits using a bit allocation table; and

comparing the demodulated bits to a known bit pattern, wherein inconsistencies between the demodulated bit pattern and the known bit pattern are used to determine the length of the impulse noise event.

42. A multicarrier modulation transceiver designed to determining a length of an impulse noise event comprising:

means for demodulating a plurality of bits using a bit allocation table; and

means for comparing the demodulated bits to a known bit pattern, wherein inconsistencies between the demodulated bit pattern and the known bit pattern are used to determine the length of the impulse noise event.

43. Any one of claims 41 or 42, wherein a forward error correction and interleaving function is disabled.

44. Any one of claims 41 or 42, further comprising:

transmitting a message indicating the length of the impulse noise event, or

means for transmitting a message indicating the length of the impulse noise event.

45. Any one of claims 41 or 42, wherein the length of the impulse noise event is determined based on at least one of the length in time, the number of affected bits, the number of affected ATM cells, the number of affected DMT packets, the number of affected DMT symbols and the number of affected FEC codewords.

46. Any one of claims 41 or 42, further comprising:

comparing the demodulated bits to a predefined transmitted bit pattern to determine the repetition rate of a length of an impulse noise event, or

means for comparing the demodulated bits to a predefined transmitted bit pattern to determine the repetition rate of a length of an impulse noise event.

47. A method of impulse noise length period determination comprising:

comparing bits demodulated using a bit allocation table to a known bit pattern, the comparison revealing inconsistencies that are correlated to a length of an impulse noise event; and

comparing the length of the impulse noise event to lengths of other similar impulse noise events to determine a period therebetween.

48. A impulse noise length period determination system comprising:

means for comparing bits demodulated using a bit allocation table to a known bit pattern, the comparison revealing inconsistencies that are correlated to a length of an impulse noise event; and

means for comparing the length of the impulse noise event to lengths of other similar impulse noise events to determine a period therebetween.

49. A system configured to adapt the impulse noise protection capability during steady-state communication comprising:

a transceiver that receives using a first FIP setting; and

a synchronization module that coordinates switching to receiving using a second FIP setting.

50. A system configured to adapt the impulse noise protection capability during steady-state communication comprising:

a transceiver that transmits using a first FIP setting; and

a synchronization module that coordinates switching to transmitting using a second FIP setting.

51. A system configured to adapt the impulse noise protection capability during initialization comprising:

a transceiver that receives using a first FIP setting; and

a synchronization module that coordinates switching to receiving using a second FIP setting.

52. A system configured to adapt the impulse noise protection capability during initialization comprising:

a transceiver that transmits using a first FIP setting; and

a synchronization module that coordinates switching to transmitting using a second FIP setting.

53. A system configured to adapt the impulse noise protection capability during steady-state communication comprising:

a transceiver that receives using a first FIP setting; and

an impulse noise protection adaptation module configured to switch the system to receiving using a second FIP setting.

54. A system configured to adapt the impulse noise protection capability during steady-state communication comprising:

a transceiver that transmits using a first FIP setting; and

an impulse noise protection adaptation module configured to switch the system to transmitting using a second FIP setting.

55. A system configured to adapt the impulse noise protection capability during initialization comprising:

a transceiver that receives using a first FIP setting; and

an impulse noise protection adaptation module configured to switch the system to receiving using a second FIP setting.

56. A system configured to adapt the impulse noise protection capability during initialization comprising:

a transceiver that transmits using a first FIP setting; and

an impulse noise protection adaptation module configured to switch the system to transmitting using a second FIP setting.

57. Any one of claims 37, 39, 49, 51, 53 or 55, wherein the switching is based on a detection of errors.

58. Any one of claims 37, 39, 49, 51, 53 or 55, wherein at least one of the first or second FIP settings are specified in a message that is received from a second transceiver.

59. Any one of claims 37, 39, 49, 51, 53 or 55, wherein at least one of the first or second FIP settings are specified in a message that is sent to a second transceiver.

60. Any one of claims 37, 39, 49, 51, 53 or 55, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is received from a second transceiver.

61. Any one of claims 37, 39, 49, 51, 53 or 55, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is sent to a second transceiver.

62. Any one of claims 37, 39, 49, 51, 53 or 55, wherein the switching is synchronized based on a FEC codeword count.

63. Claim 62, wherein a message is received from a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

64. Claim 62, wherein a message is sent to a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

65. Any one of claims 38, 40, 50, 52, 54 or 56 wherein the switching is based on a detection of errors.

66. Any one of claims 38, 40, 50, 52, 54 or 56, wherein at least one of the first or second FIP settings are specified in a message that is sent to a second transceiver.

67. Any one of claims 38, 40, 50, 52, 54 or 56, wherein at least one of the first or second FIP settings are specified in a message that is received from a second transceiver.

68. Any one of claims 38, 40, 50, 52, 54 or 56, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is received from a second transceiver.

69. Any one of claims 38, 40, 50, 52, 54 or 56, wherein a time period during which at least one of the first and second FIP settings are to be used is specified in a message that is sent to a second transceiver.

70. Any one of claims 38, 40, 50, 52, 54 or 56, wherein the switching is synchronized based on a FEC codeword count.

71. Claim 70, wherein a message is sent to a second transceiver indicating a FEC codeword counter value on which the switch is to occur.

72. Claim 70, wherein a message is received from a second transceiver indicating a FEC codeword counter value on which the switch is to occur.